

## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

REC'D 10 JUL 2006

PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SLRE.103540/	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/US04/26700	International filing date (day/month/year) 18 August 2004 (18.08.2004)	Priority date (day/month/year) 22 August 2003 (22.08.2003)	

International Patent Classification (IPC) or national classification and IPC

IPC: Please See Continuation Sheet  
USPC: 504/101,194,284,317,336,354;514/130,263,2,419,450,543,557,570,573,617,732,762

## Applicant

STOLLER ENTERPRISES, INC.

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

- (sent to the applicant and to the International Bureau) a total of \_\_\_ sheets, as follows:
  - sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
  - sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_ , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 08 March 2006 (08.03.2006)	Date of completion of this report 16 June 2006 (16.06.2006)
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer S. Mark Clardy Telephone No. 571-272-1600

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on:
  - the international application in the language in which it was filed.
  - a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4(a))
    - international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
  
2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
  - the international application as originally filed/furnished
  - the description:
 

pages 1-43 as originally filed/furnished  
 pages\* NONE received by this Authority on \_\_\_\_\_  
 pages\* NONE received by this Authority on \_\_\_\_\_
  - the claims:
 

pages 44-52 as originally filed/furnished  
 pages\* NONE as amended (together with any statement) under Article 19  
 pages\* NONE received by this Authority on \_\_\_\_\_  
 pages\* NONE received by this Authority on \_\_\_\_\_
  - the drawings:
 

pages 1-4 as originally filed/furnished  
 pages\* NONE received by this Authority on \_\_\_\_\_  
 pages\* NONE received by this Authority on \_\_\_\_\_
  - a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
  
3.  The amendments have resulted in the cancellation of:
  - the description, pages \_\_\_\_\_
  - the claims, Nos. \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to the sequence listing (*specify*): \_\_\_\_\_
  
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - the description, pages \_\_\_\_\_
  - the claims, Nos. \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/US04/26700**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

Novelty (N)	Claims <u>1-74</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-74</u>	NO
Industrial Applicability (IA)	Claims <u>1-74</u>	YES
	Claims <u>NONE</u>	NO

## 2. Citations and Explanations (Rule 70.7)

Claims 1-74 lack an inventive step under PCT Article 33(3) as being obvious over Frederick (US 4,675,327) in view of Wei (CN 1262037A).

Frederick teaches antimicrobial embalming fluids comprising the synergistic combination of a disinfectant and a plant hormone or plant growth regulator (columns 2-3). The auxinic hormone NAA was tested in Example VI at a concentration of 1.0 mM resulting in a zone of inhibition of 10.0 mm, thus indicating that the antimicrobial property of NAA was known.

Wei teaches that plant auxin was a known antibacterial and antiviral agent.

Thus it would have been *prima facie* obvious to the ordinary artisan at the time the invention was made to have used plant hormones such as auxins as antimicrobial agents because the prior art teaches that such activity was known for this class of agents. Since application for antimicrobial purposes was known, at concentrations below the plant hormone activity threshold, it would be apparent that other effects of such applications, including inhibition of insect infestation, would necessarily follow from such applications. Further, absent a showing of criticality, it would be obvious to apply the compositions to any plant or plant part, including seed.

Claims 1-74 meet the criteria set out in PCT Article 33(4), and thus possess industrial applicability because the subject matter claimed can be made or used in industry.

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.  
PCT/US04/26700

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Continuation of IPC:  
**A01N 31/08( 2006.01),37/10( 2006.01),43/38( 2006.01),57/14( 2006.01);A01P 3/00( 2006.01),1/00( 2006.01),21/00( 2006.01)**